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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,419	07/10/2003	Tadafumi Shimizu	35874	4019
116	7590	08/10/2004	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			NGO, HOANG X	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/617,419	Applicant(s) SHIMIZU ET AL.	
	Examiner Hoang Ngo	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/10/03 & 1/21/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to because of the following informalities:

Claim 3, line 2, the term "coire cores" should be changed to - -coil core- - to correct typo error. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's cited prior art (Japan Pat. No. 2000-206813).

The prior art discloses a fixing device for an image forming apparatus comprising a heat roller 10 using eddy current; an induction heating element (L1, L2, L3, abstract) for generating the eddy current on the heat roller being disposed along the heat roller and facing a part of the heat roller (Fig. 5); a plurality of coil cores (1e, 2e, 3e, abstract) provided outside the induction heating element and being arranged at an interval in a longitudinal direction of the induction heating element such that a longitudinal direction of one of the plurality of coil cores forms a predetermined angle with the longitudinal direction of the induction heating element (Fig. 6).

The prior art of record further discloses the predetermined angle is an acute angle (i.e. an angle of about 90 degrees formed between 1e and 1ia); the plurality of coil cores are arranged at two different intervals in the longitudinal direction (Fig. 5); the predetermined angle are arranged such that heat distribution of the heat roller is approximately uniform (i.e. uniform shown in Fig. 4) and the intervals become smaller as each of the coil cores is placed farther from a center of the induction heating element; an interval at an end portion of the heat induction heating element is smaller than that of a center portion; a central core provided along a longitudinal direction of the induction heating element (see heat distribution between L1, L2, and L3, Fig. 4); the coil cores are C-shaped coil cores (Fig. 5).

4. Claims 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's cited prior art (U.S. Pat. No. 6,078,781).

The prior art discloses a fixing device comprising a heat generating member 202 having a rotating body made of a magnetic metal member (Fig. 5); an inductive heating unit having a magnetizing coil 211 opposed to the outer peripheral surface of the heat generating member and having a bundle of wires 111 with surfaces insulated drawn in the direction of a rotation axis of the heat generating member and wound along the direction of the circumference of the heat generating member (Fig. 1) and generating heat by electromagnetic induction (Col. 7, line 61); wherein the magnetizing coil having a length longer than the length of the heat generating member (Col. 31, lines 26-33). The prior art further discloses a fixing roller forms the fixing nip part (Fig. 15).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Ngo whose telephone number is (571) 272-2138. The examiner can normally be reached on 6:00am - 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hoang Ngo
Primary Examiner
Art Unit 2852

Hxn